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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/090.406 06/04/98 PARK

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EXAMINER

PATEL.V

ART UNIT

PAPER NUMBER

2879

DATE MAILED:

04/05/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/090,406

Applicant(s)
Park

Examiner
Vip Patel

Group Art Unit
2879



☒ Responsive to communication(s) filed on Mar 23, 2000

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-14 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-14 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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Response to Amendment

In response to the applicant's amendment received on 3-23-00, the changes requested by the applicant to the specification and claims have been entered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

Claims 1-3 and 5-13 are rejected under 35 U.S.C. § 102(e) as being anticipated by Reynolds (US 5682081).

Regarding claim 1, Reynolds discloses a discharge space structure of plasma display panel (line 47 of column 2) comprising a first substrate (12), a second substrate (not shown) opposite the first substrate, a barrier layer (14) formed on the first substrate having a plurality of raised portions (40) along its length, and plurality of discharge spaces (20; between the raised portions). As per claim 12, each raised portion may be considered as a barrier. As per claims 2 and 13, the barrier layer includes fluorescent layer (30, 32, and 34). As per claim 3, the barrier layer is shaped to prevent discharge between adjacent discharge spaces. As per claims 5-8, the portion of the fluorescent layer is has hemispherical, semi-elliptical, and plasma

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formation shape. As per claim 9, the height of the fluorescent layer decreases toward the center of the discharge spaces. As per claims 10-11, discharge spaces are spherical.

Claims 1-13 are rejected under 35 U.S.C. § 102(e) as being anticipated by Schermerhorn (US 5723945).

Regarding claim 1, Schermerhorn discloses a discharge space structure of plasma display panel (figure 7) comprising a first substrate (14), a second substrate (12) opposite the first substrate, a barrier layer (32 of figure 9) formed on the first substrate having a plurality of raised portions (24 of figure 9) along its length, and plurality of discharge spaces (26 of figure 9). As per claim 12, each raised portion is considered as a barrier. As per claims 2 and 13, the barrier layer includes fluorescent layer (42). As per claim 3, the barrier layer is shaped to prevent discharge between adjacent discharge spaces. As per claim 4, Schermerhorn discloses the fluorescent layer being flat. As per claims 5-8, the portion of the fluorescent layer is has hemispherical, semi-elliptical, and plasma formation shape 9 (figures 10 and 11) . As per claim 9, the height of the fluorescent layer decreases toward the center of the discharge spaces. As per claim 11, discharge spaces are spherical.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reynolds (US 5682081) and common knowledge in the art.

Regarding claim 4, Reynolds discloses all the limitations of claim 4 9 except a portion of the fluorescent layer being flat. However, it is notoriously known to provide a continuous fluorescent layer (including at the space above electrodes 22) for gaining increased brightness. Schermerhorn (US 5723945) evidences the above common knowledge.

Thus, it would have been obvious, at the time the invention was made, to a person having ordinary skill in the art to provide a flat fluorescent layer (or provide fluorescent layer above the electrodes 22) as taught by common knowledge for gaining increased brightness.

Regarding claim 14, the references cited and discussed regarding the apparatus of claims 1-13 disclose all of the individual elements of the method of claim 14. The artisan seeking to implement the apparatus of claims 1-13 would necessarily perform the method of claim 14. Thus, it would have been obvious, at the time the invention was made, to a person having ordinary skill in the art to utilize the teaching of the cited

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references to result in the method as claimed for the reasons given in regarding claims 1-13.

Remarks

Applicant's arguments have been considered but are deemed to be moot in view of the new grounds of rejection.

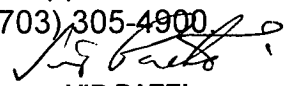
Applicant's amendment necessitated the new grounds of rejection. Accordingly, **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vip Patel whose telephone number is (703) 305-4846. The examiner can normally be reached on Monday-Thursday from 6:30 AM- 5:00 PM.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4900.


VIP PATEL
PRIMARY EXAMINER
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